

Patent claims

1. A process for producing a molding, comprising a disk-like or plate-like basic body (5) having a large number of knob-like and/or web-like elevations (4, 3) which merge into the basic body (5) with inclined side surfaces, by means of pressing and sintering powdery raw materials close to the final shape, characterized in that the pressing is carried out in a two-stage pressing operation, in the first stage the boundary surfaces of the basic body (5) being pressed to at least the approximate final shape as far as the transition regions of the elevations (3, 4) and, at the same time, the elevations (3, 4) being pressed to an oversize, specifically in such a way that their projection h' from the basic body (5) is greater by 10% - 150% as compared with the projection h from the basic body (5) in the finally pressed state, and that their side surfaces form an angle of inclination α' in the range from 90° - 150° with the respectively adjacent boundary surface of the basic body (5) and, in the second stage, the elevations (3, 4) are pressed to at least approximately the final shape, in such a way that the angle of inclination α' is enlarged to a value α which lies in the range from 95° - 170° .
2. The process for producing a molding as claimed in claim 1, characterized in that the projection h' is 30% - 100% greater as compared with the projection h in the finally pressed state.
3. The process for producing a molding as claimed in claim 1 or 2, characterized in that the angle of inclination α' lies in the range from 110° - 130° , and the angle of inclination α lies in the range from 115° - 160° .

4. The process for producing a molding as claimed in one of claims 1 to 3, characterized in that the pressed object is pre-sintered after the first pressing stage.
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5. The process for producing a molding as claimed in one of claims 1 to 4, characterized in that the molding is produced from an alloy having at least 20% by weight of chromium component.
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6. The process for producing a molding as claimed in claim 5, characterized in that, in addition to chromium and iron, the alloy also consists of one or more additional metallic and/or ceramic alloy components of a total of at most 40% by weight, and in that the additional alloy components are introduced into the powdery raw materials as a pre-alloy with chromium and/or iron.
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7. The process for producing a molding as claimed in claim 5 or 6, characterized in that the molding is the interconnector of a fuel cell.